



CAMEO Chemicals

Chemical Data Sheet

Chemical Name: STRONTIUM SULFIDE

Section 1 - Chemical Identifiers

CAS Number	UN/NA Number	STCC Number	CHRIS Code
1314-96-1	none	none	none

DOT Hazard Label: data unavailable

NFPA 704

Blue - Health Hazard -
Red - Flammability -
Yellow - Reactivity -
White - Special -

General Description

PHYSICAL DESCRIPTION: Gray powder with an odor of H₂S in moist air. (NTP, 1992)

Section 2 - Hazards

Reactivity Alerts

none

Air & Water Reactions

Slowly releases H₂S in moist air.

Fire Hazard

No information available.

Health Hazard

ACUTE/CHRONIC HAZARDS: Irritant to skin and tissue. Moderate fire hazard and explosion risk. (NTP, 1992)

Reactivity Profile

STRONTIUM SULFIDE reacts vigorously with acids to release hydrogen sulfide gas. May react exothermically with oxidizing agents including inorganic oxoacids, organic peroxides and epoxides, and inorganic peroxides to generate toxic gases. (REACTIVITY, 2003)

Belongs to reactive group(s)

- Sulfides, Inorganic

Section 3 - Response Recommendations

Fire Fighting

A fire in your laboratory involving this chemical should be extinguished with a dry chemical, carbon dioxide or halon extinguisher. (NTP, 1992)

Non-Fire Response

SMALL SPILLS AND LEAKAGE: If you spill this chemical, you should dampen the solid spill material with 5% acetic acid, then transfer the dampened material to a suitable container. Use absorbent paper dampened with 5% acetic acid to pick up any remaining material. Your contaminated clothing and the absorbent paper should be sealed in a vapor-tight plastic bag for eventual disposal. Wash all contaminated surfaces with 5% acetic acid followed by washing with a strong soap and water solution. Do not reenter the contaminated area until the Safety Officer (or other responsible person) has verified that the area has been properly cleaned.

STORAGE PRECAUTIONS: You should store this material in a refrigerator. (NTP, 1992)

Protective Clothing

RECOMMENDED RESPIRATOR: Where the neat test chemical is weighed and diluted, wear a NIOSH-approved half face respirator equipped with an organic vapor/acid gas cartridge (specific for organic vapors, HCl, acid gas and SO₂) with a dust/mist filter.

RECOMMENDED GLOVE MATERIALS: Permeation data indicate that butyl rubber gloves may provide protection to contact with this compound. Butyl rubber over latex gloves is recommended. However, if this chemical makes direct contact with your gloves, or if a tear, hole or puncture develops, remove them at once. (NTP, 1992)

First Aid

EYES: First check the victim for contact lenses and remove if present. Flush victim's eyes with water or normal saline solution for 20 to 30 minutes while simultaneously calling a hospital or poison control center. Do not put any ointments, oils, or medication in the victim's eyes without specific instructions from a physician. IMMEDIATELY transport the victim after flushing eyes to a hospital even if no symptoms (such as redness or irritation) develop.

SKIN: IMMEDIATELY flood affected skin with water while removing and isolating all contaminated clothing. Gently wash all affected skin areas thoroughly with soap and water. If symptoms such as redness or irritation develop, IMMEDIATELY call a physician and be prepared to transport the victim to a hospital for treatment.

INHALATION: IMMEDIATELY leave the contaminated area; take deep breaths of fresh air. IMMEDIATELY call a physician and be prepared to transport the victim to a hospital even if no symptoms (such as wheezing, coughing, shortness of breath, or burning in the mouth, throat, or chest) develop. Provide proper respiratory protection to rescuers entering an unknown atmosphere. Whenever possible, Self-Contained Breathing Apparatus (SCBA) should be used; if not available, use a level of protection greater than or equal to that advised under Protective Clothing.

INGESTION: Some heavy metals are VERY TOXIC POISONS, especially if their salts are very soluble in water (e.g., lead, chromium, mercury, bismuth, osmium, and arsenic). IMMEDIATELY call a hospital or poison control center and locate activated charcoal, egg whites, or milk in case the medical advisor recommends administering one of them. Also locate Ipecac syrup or a glass of salt water in case the medical advisor recommends inducing vomiting. Usually, this is NOT RECOMMENDED outside of a physician's care. If advice from a physician is not readily available and the victim is conscious and not convulsing, give the victim a glass of activated charcoal slurry in water or, if this is not available, a glass of milk, or beaten egg whites and IMMEDIATELY transport victim to a hospital. If the victim is convulsing or unconscious, do not give anything by mouth, assure that the victim's airway is open and lay the victim on his/her side with the head lower than the body. DO NOT INDUCE VOMITING. IMMEDIATELY transport the victim to a hospital. (NTP, 1992)

Section 4 - Physical Properties**Molecular Formula:** SSr

Flash Point: data unavailable

Lower Explosive Limit: data unavailable

Upper Explosive Limit: data unavailable

Auto Ignition Temperature: data unavailable

Melting Point: > 3632 ° F (NTP, 1992)

Vapor Pressure: data unavailable

Vapor Density: data unavailable

Specific Gravity: 3.7 at 59.0 ° F (NTP, 1992)

Boiling Point: data unavailable

Molecular Weight: 119.68 (NTP, 1992)

Water Solubility: data unavailable

AEGL: data unavailable

ERPG: data unavailable

TEEL: data unavailable

IDLH: data unavailable

TLV TWA: data unavailable

TLV STEL: data unavailable

Section 5 - Regulatory Information**Regulatory Names**

No information available.

CAA RMP: Not a regulated chemical.**CERCLA:** Not a regulated chemical.**EPCRA 302 EHS:** Not a regulated chemical.**TRI (EPCRA 313):** Not a regulated chemical.**RCRA chemical code:** none

CAMEO Chemicals

[Home](#)[Help](#)[Search Chemicals](#)[New Search](#)[Modify Search](#)[Search Results](#)[MyChemicals](#)

chemicals: 0

[View MyChemicals](#)[Predict Reactivity](#)

About CAMEO Chemicals



CAMEO Chemicals is a tool designed for first responders and emergency planners who are involved in hazardous materials incident response and planning.

CAMEO Chemicals is an online library of more than 6,000 data sheets containing response-related information and recommendations for hazardous materials that are commonly transported, used, and/or stored in the United States. CAMEO Chemicals also contains the Chemical Reactivity Worksheet (in the Predict Reactivity section of this site), which you can use to predict potential reactive hazards between chemicals of concern.

CAMEO® is an umbrella product name that encompasses many products offered by NOAA's Office of Response and Restoration (NOAA OR&R). Products in the CAMEO line include:

- CAMEO: A suite of software tools that you can download and install on your computer. It includes the same chemical library and Reactivity Worksheet that are in CAMEO Chemicals. It also includes a storage facilities database, ALOHA® (a model that can predict the area that could be affected by a toxic gas release, fire, or explosion) and MARPLOT (an electronic mapping program). CAMEO can be downloaded from the [CAMEO website](#). It is included in the U.S. Coast Guard's Standard Workstation III Image.
- CAMEO Chemicals: An online version of the chemical database and reactivity tool that are part of the CAMEO program.
- Chemical Reactivity Worksheet: A downloadable program that includes the same chemical database as the previous products, but which was built specifically to answer questions about the reactivity of substances or mixtures of substances. Most of its functionality is available now in both CAMEO and CAMEO Chemicals. It can be downloaded from the [OR&R website](#).

Links to and from our site

You also are welcome to make a link to any of our webpages; you do not need to request our permission.

Our website may contain links to websites of other government agencies, research and educational institutions, and, in a few cases, to websites run by private organizations.

- We link to other websites when doing so helps us to perform our mission to apply scientific information and objective analysis to reduce risks to coastal habitats and resources from spills.
- Links to other websites do not imply that NOAA endorses the opinions or ideas expressed on those sites, and do not guarantee the validity of the information provided on those websites.
- Links to commercial sites are not an endorsement by NOAA of any vendor's products or services. Any mention of commercial products at our site is for your information only.
- We will not provide links to other websites if such links would appear to provide an official endorsement of fundraising efforts, commercial activities, or lobbying for a political agenda.

Credits

CAMEO Chemicals was developed jointly by the following organizations:

- National Oceanic and Atmospheric Administration (NOAA) [Office of Response and](#)

Restoration

- Environmental Protection Agency (EPA) Office of Emergency Management
- U.S. Coast Guard (USCG) Research and Development Center

Information about each chemical was compiled from a variety of documents and databases, each prepared by a different organization. The following source abbreviations are used in the chemical data sheets:

- **(49CFR)** - Code of Federal Regulations, Title 49 Part 172. Transportation. 2003. Washington, D.C.: U.S. Government Printing Office.
- **(AAR, 2003)** - Association of American Railroads. 2003. Emergency Handling of Hazardous Materials in Surface Transportation. Washington, D.C.: Bureau of Explosives.
- **(AEGL, 2003)** - National Advisory Committee for AEGLs. 2003. Online at www.epa.gov/opptintr/aegl.
- **(AIHA, 2003)** - American Industrial Hygiene Association. 2003. Emergency Response Planning Guidelines and Workplace Environmental Exposure Level Guides Handbook. Fairfax, Virginia: AIHA Press (can be ordered from www.aiha.org).
- **(CAS, 2003)** - Chemical Abstract Service. 2003. Formulas and CAS numbers. Electronic file. Seattle: Hazardous Materials Response Division, National Oceanic and Atmospheric Administration.
- **(DOT, 2000)** - U.S. Department of Transportation. 2000. Emergency Response Guidebook. Neenah, Wisconsin: J. J. Keller & Associates. Online at hazmat.dot.gov/pubs/erg/guidebook.htm.
- **(EPA, 1998)** - U.S. Environmental Protection Agency. 1998. Extremely Hazardous Substances (EHS) Chemical Profiles and Emergency First Aid Guides. Washington, D.C.: U.S. Government Printing Office.
- **(NFPA, 2002)** - National Fire Protection Association. 2002. Hazardous Chemicals Data. In: Fire Protection Guide to Hazardous Materials, 12th Ed. NFPA 49-1991. Quincy, Massachusetts: NFPA (can be ordered from www.nfpa.org).
- **(NIOSH, 2003)** - National Institute of Occupational Safety and Health. 2003. Pocket Guide to Chemical Hazards. Washington, D.C.: U.S. Government Printing Office. Online at www.cdc.gov/niosh/npg/pgintrod.html.
- **(NOAA, 2003)** - Information generated by NOAA, Office of Response and Restoration.
- **(NTP, 1992)** - National Toxicology Program, Institute of Environmental Health Sciences, National Institutes of Health. 1992. National Toxicology Program Chemical Repository Database. Research Triangle Park, North Carolina: NTP.
- **(REACTIVITY, 2003)** - Information generated by NOAA, Office of Response and Restoration, during the development of the Chemical Reactivity Worksheet.
- **(TEEL, 2005)** - Department of Energy, Subcommittee on Consequence Assessment and Protective Actions (DOE SCAPA). Online at orise.orau.gov/emi/scapa/teels.htm.
- **(Title III, 1998)** - U.S. Environmental Protection Agency. October 1998. Title III List of Lists. Consolidated List of Chemicals Subject to Reporting Under the Emergency Planning and Community Right-to-Know Act and Section 112(r) of the Clean Air Act. EPA 550-8-01-003. Washington, D.C.: U.S. Government Printing Office.
- **(USCG, 1999)** - U.S. Coast Guard. 1999. Chemical Hazard Response Information System (CHRIS) - Hazardous Chemical Data. Computer tape. Washington, D.C.: U.S. Government Printing Office. Online at www.chrismanual.com.

Copyrights

CAMEO Chemicals and all other CAMEO products are free to use, however, the chemical data itself is subject to the copyright restrictions of the company or organization that provided the data.

Terms and Conditions

Users of the CAMEO Chemicals website and documentation agree to the following guidelines and restrictions:

- **Use and Distribution Guidelines and Restrictions**

The response information contained in CAMEO Chemicals that has been marked AAR has been supplied by, and is the property of, the Association of American Railroads. CAS registry numbers, CAS synonyms, and CAS molecular formulas have been supplied by, and are the property of, the Chemical Abstracts Service. NFPA ratings have been supplied by, and are the property of, the National Fire Protection Association. Emergency Response Planning Guidelines (ERPGs) have been supplied by, and are property of, the American Industrial Hygiene Association. AAR, CAS, AIHA, and NFPA data contained in CAMEO shall not be duplicated by the recipient, except as indicated above, without written permission from AAR, CAS, AIHA, and NFPA.

The recipient shall honor all disclaimers and other limitations of liability associated with those organizations that have provided data in the compilation of the CAMEO chemical database.

- **Limitation of Liability**

The United States Government has used its best efforts to deliver complete data incorporated into CAMEO Chemicals. Nevertheless, the U.S. Government does not warrant accuracy or completeness, is not responsible for errors and omissions, and is not liable for any direct, indirect, or consequential damages flowing from the recipient's use of CAMEO Chemicals. CAMEO software are being distributed "as is" and the U.S. Government does not make any warranty claims, either expressed or implied, with respect to the CAMEO software, its quality, accuracy, completeness, performance, merchantability, or fitness for any intended purpose.

- **Indemnification**

Non-governmental recipients shall indemnify and save harmless the United States and its agents and employees against any and all loss, damage, claim, or liability whatsoever, due to personal injury or death, or damage to property of others directly or indirectly due to the use of CAMEO Chemicals by the recipient, including failure to comply with the provisions of these terms and conditions.

- **Trademarks**

CAMEO is a registered trademark of the U.S. Government.

References

The following source references were used in developing the reactivity section of this site:

1. Sax, N. I.: Dangerous Properties of Industrial Materials. Reinhold Publishing Corporation, New York, 9th ed., 1996.
2. Kirk-Othmer: Encyclopedia of Chemical Technology. Wiley-Interscience, New York, 3rd ed., 1978 and 4th ed., 1992.
3. Bretherick's Handbook of Reactive Chemical Hazards, 5th ed. Butterworth-Heinemann, Oxford, 1995.
4. Hardy, J. K.: Hazardous Chemical Database. University of Akron, Ohio, 1997.
5. Lewis, R. J.: Hazardous Chemicals Desk Reference, 3rd ed. Van Nostrand Reinhold, New York, 1993.
6. Davis, D. J. and Davis, J. A.: Hazardous Materials Reference Book. Van Nostrand Reinhold, New York, 1996.
7. Carson, P. A. and Mumford, C. J.: Hazardous Chemicals Handbook. Butterwork-Heinemann, Oxford, 1994.
8. ChemCheck Handbook. STP Specialty Technical Publishers, Vancouver, Canada, 1994.
9. National Toxicity Program.
10. C. R. Noller, "Chemistry of Organic Compounds," 2nd Ed., W. B. Saunders Company, 1958.
11. Underwriters Laboratory's Bulletin of Research.
12. Lancaster Catalog 2000-2001, Lancaster Synthesis Ltd.
13. J. W. Mellor, "A Comprehensive Treatise on Inorganic Chemistry and Theoretical Chemistry," First Edition and supplements, Longmans Green & Co., London, and Wiley-Interscience, New York.
14. "The Merck Index, An Encyclopedia of Chemicals, Drugs, and Biologicals," S. Budavari, Ed., Merck & Co., Inc., Rahway, New Jersey, 1996 (or earlier edition).
15. Farm Chemicals Handbook, 1995, Meister Publishing Company, Willoughby, Ohio.
16. Berichte der deutsche Chemische Gesellschaft.
17. Aldrich Handbook of Fine Chemicals and Laboratory Equipment, 2000-2001 Aldrich-Sigma.
18. Association of American Railroads.
19. Annalen der Chemie.
20. Weast, Handbook of Chemistry and Physics, 59th Ed., CRC Press, 1979.

21. G. G. Hawley, "The Condensed Chemical Dictionary," 9th ed, 1977.
22. Chemical and Engineering News, published weekly by the American Chemical Society.
23. Berichte der deutsche Chemische Gesellschaft.
24. Journal of the American Chemical Society.
25. Journal of Chemical Education.
26. Journal of Hazardous Materials.
27. Journal of Loss Prevention.
28. Journal of Organic Chemistry, published by the American Chemical Society.
29. Journal of Organometallic Chemistry.
30. Chemical Manufacturers Association Case Histories.
31. National Fire Protection Association (NFPA).
32. NIOSH.
33. Chemistry and Technology of Explosives, Urbanski, T., London, MacMillan.
34. Fire and Explosion Risks, von Schwartz, E., London, Griffin, 1918.
35. Safety in the Chemical Laboratory, Pieters, London, Academic Press, 2nd ed, 1957.

Reporting an error or bug

If you discover an error or bug in CAMEO Chemicals or any chemical data sheet, please let us know by emailing: orr.cameo@noaa.gov

[About](#) | [Privacy Statement](#) | [Contact Us](#)



This page is maintained by the [Office of Response and Restoration](#),
[NOAA's Ocean Service](#), [National Oceanic and Atmospheric Administration](#), US
[Department of Commerce](#).
US Government main portal: USA.gov.